NSF

XXXXXXXXX Palo Alto Ewing

Dear Dr. Turner:

Me 30 1253

A propos Ewing's proposal on the microbiology of polar sediments:

I did talk to Ewing about this, but I must say that I was more enthusiastic about the conception than optimistic about its execution in the terms of the present proposal. He does have one unique possibility— to study samples that have been cored and maintained at very high pressures, as they may contain unique forms of microorganisms adapted to these conditions. Some of the very specific problems that arise in connection with the project should be very rewarding; in the hands of the particular group Ewing has assembled, the shotgun approach is much less promising.

Plainly there should be some way to exploit the collections that can be made. Not many others will be as receptive as Ewing is to the biological potentialities. A project of this scale is again one that ought not to be merely accepted or rejected as it stands; a concerted effort should be made to improve its possibilities.

I would suggest that you consult two other people for advice both on the existent proposal and ways it might be greatly improved: these are Dr. W. D. McElroy, Biology Department, Johns Hopkins University, Baltimore (with respect to probelsm of biological processes under high pressures) and Dr. Seymour Hutner, Haskins Laboratories, 305 E. 43 Street, New York 17 (good general microbiology).

As to some sort of rating of this as a proposal -- in default of anything better, particular encouragement should be given this as a start, but I would not rate it very highly on its own merits.

Yours sincerely,

Joshua Lederberg Professor of Genetics